

Amendment under 37 C.F.R. § 1.111
Application No. 10/076,532
Attorney Docket No. 020191

REMARKS

Claims 1-16 are pending in the application. No claims have been amended. By this response, applicants have added new claims 9-16.

On the Merits

Claims 1-3, 5 and 6 were rejected under 35 U.S.C. § 102(e) as being anticipated by *Okada* (US Patent 6,928,229). Applicants respectfully traverse this rejection.

Independent Claim 1:

Claim 1 requires:

An image recording apparatus which records image signals in a compressed state into a recording medium on which a plurality of unit recording zones each of which has a first size are formed, comprising:

- ¹an inputter for inputting the image signals;
- ²a compressor for compressing each of the image signals inputted by said inputter into a second size which is equal to or smaller than $1/N$ (N : integer) of the first size; and
- ³a recorder for respectively recording compressed image signals generated by the compressor into the unit recording zones.

The Office Action contends that the second element of claim 1 is disclosed by column 3, lines 16-27 of *Okada*. This passage of *Okada* states in pertinent part, “in the recording mode, the DSP 22 reduces a photographed image to $1/n$ in an area ratio (e.g. $n=16$) by thinning out pixels (by, e.g., orthogonally transforming input image data to quantize or mask high-frequency components with a large coefficient). . . .”

It appears that *Okada* does disclose image compression, but it does not appear that *Okada* discloses the required second element of claim 1, namely *compressing each of the image signals ... into a second size which is equal to or smaller than 1/N of the first size*.

In other words, in the present invention, “a plurality of unit recording zones each ... has a first size....” Each image is compressed “into a second size which is equal to or smaller than ... the first size.” *Okada* does not disclose that each recording zone has the same first size, or that “each of the images signals ... is equal to or smaller than ... the first size.” Applicants therefore respectfully traverse this rejection.¹

Dependent Claim 2:

Claim 2 requires:

said recorder includes a searcher for searching unit recording zones each of which is in a vacant state, a writer for writing the compressed image signals into the unit recording zones discovered by said searcher, and a creator for creating link information indicating a link state of the unit recording zones in which the compressed image signals are written. Emphasis added.

¹ The unit recording zone, each of which has a first size, is described in the specification on page 2:

Each unit recording medium has the first size, and the compressed image signals have a second size which is equal to or smaller than 1/N of the first size. This is the reason why N of the compressed image signals is recorded in each of the unit recording zones. Therefore, even if management information regarding the image signals is destructed, it is still possible to easily reproduce the image signals.

As is apparent from the description in the specification, this required element of claim 1 serves an important function, and is distinct from the teachings of the *Okada* reference.

Furthermore, the “unit recording zones, each of which have a first size,” is first recited in the preamble of claim 1, but then referred to in the second element of the claim. Therefore, the language used in the preamble should have patentable weight. “Any terminology in the preamble that limits the structure of the claimed invention must be treated as a claim limitation.” *Corning Glass Works v. Sumitomo Elec. U.S.A., Inc.*, 868 F.2d 1251 (Fed. Cir. 1989).

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The Office Action contends that the underlined portion of claim 2 is disclosed by *Okada* in column 4, lines 10-12. *Okada* states, “When the recording/reproduction switch 52 is set in the recording mode (S1), the system control circuit clears the memory 20, and resets its internal counter m to 0 (S2).”

The cited passage by the Office Action does not appear to disclose what is required by claim 2, namely, *said recorder includes a searcher for searching unit recording zones each of which is in a vacant state.*

Applicants submit that the Office has not met its burden of showing prima facie anticipation because the Office Action has not addressed an element of the claim and this element is not disclosed or fairly suggested in any of the cited references, and therefore applicants respectfully traverse this rejection.

Claim Rejections under 35 U.S.C. § 103(a)

Claim 4 was rejected under 35 U.S.C. § 103(a) as being unpatentable over *Okada* (US Patent 6,928,229); claim 7 was rejected under 35 U.S.C. § 103(a) as being unpatentable over *Okada* in view of *Takahashi et al.* (US Patent 6,424,795); claims 8/1, 8/2, 8/3, 8/4, 8/5 and 8/6 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Okada* in view of *Peker et al.* (US Patent 7,003,154); and claim 8/7 was rejected under 35 U.S.C. § 103(a) as being unpatentable over *Okada* in view of *Takahashi et al.* and *Peker et al.*

Each of these claims depends from claim 1. The secondary references relied upon by the Office Action do not provide the teachings that *Okada* lacks, as described above. Therefore, each of these rejections is respectfully traversed.

New Independent Claim 9:

According to independent claim 9, formed on a recording medium is a plurality of unit recording zones each of which has a first size. A holder holds the recording medium. Each of a plurality of still images is compressed by a compressor up to a second size which is equal to or smaller than $1/N$ (N : positive integer) of the first size. A recorder records compressed still images created by the compressor into the plurality of unit recording zones at a rate of N images per zone. A link former forms a link between recorded unit recording zones out of the plurality of unit recording zones.

Thus, a size of a single compressed still image is equal to or smaller than $1/N$ of a size of a single unit recording zone. The compressed still image is recorded into the unit recording zones at a rate of N images per zone, and therefore, it is possible to prevent the single compressed still image from being recorded over a plurality of the unit recording zones. Consequently, even if a link between the unit recording zones is destroyed, each of the compressed still images is easily reproduced from the recording medium.

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In contrast, *Okada* may disclose to reduce a photographed image to $1/n$ in a ratio (e.g., $n=16$) by thinning out pixels. However, *Okada* fails to disclose or remotely suggest anything about the constitution of independent claim 9 which compresses each of the still images up to a size which is equal to or smaller than $1/N$ of a size of the unit recording zone formed on the recording medium, and records the created compressed still images into the unit recording zones at a rate of N images per zone.

Takahashi et al. may disclose to compress a still image by the JPEG, however *Takahashi et al.* fails to disclose or remotely suggest anything about the above described constitution of the claim 9.

Peker et al. may disclose a surveillance camera, however *Peker et al.* fails to disclose or remotely suggest anything about the above described constitution of claim 9.

Accordingly, applicants believe that it is not possible to reach independent claim 9 from each or a combination of the references, and therefore, independent claim 9 and dependent claims 10-16 are patentable.

In view of the aforementioned remarks, applicants submit that all of the claims, as herein presented, are in condition for allowance. Applicants request such action at an early date.


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If the Examiner believes that this application is not now in condition for allowance, the Examiner is requested to contact applicant's undersigned attorney to arrange for an interview to expedite the disposition of this case.

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

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